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Docket No.: 588.1020  
Date: January 26, 2007

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SPW

In re application of: **Christoph LINDENSCHMIDT et al.**  
Serial No.: 10/807,030  
Filed: March 23, 2004  
For: **DEVICE AND METHOD FOR CONTROLLING A PARKING LOCK  
HOLDING MAGNET**

Sir:

Transmitted herewith is an **Appellant's Brief** under 37 CFR §41.37 including **Appendices A to C (12 pages)** in the above-identified application.

- [ ] Also transmitted herewith are:  
[ ] Petition for extension of time under 37 C.F.R. 1.136  
[ ] Other:
- [X] Check(s) in the amount of **\$500.00** is/are attached to cover:  
[ ] Filing fee for additional claims under 37 C.F.R. 1.16  
[ ] Petition fee for extension under 37 C.F.R. 1.136  
[X] Other: **Fee for filing a brief in support of an appeal under 37 CFR § 41.20(b)(2)**
- [X] The Assistant Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0552.
- [X] Any filing fee under 37 C.F.R. 1.16 for the presentation of additional claims which are not paid by check submitted herewith.
- [X] Any patent application processing fees under 37 C.F.R. 1.17.
- [X] Any petition fees for extension under 37 C.F.R. 1.136 which are not paid by check submitted herewith, and it is hereby requested that this be a petition for an automatic extension of time under 37 CFR 1.136.

  
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I hereby certify that the documents referred to as attached therein and/or transmitted herewith and/or fee(s) are being deposited with the United States Postal Service as "first class mail" with sufficient postage in an envelope addressed to "Mail Stop: APPEAL BRIEF - PATENTS, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on January 26, 2007.

DAVIDSON, DAVIDSON & KAPPEL, LLC

BY:   
\_\_\_\_\_  
Randall M. Berman



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Re: Application of: Christoph LINDENSCHMIDT et al.  
Serial No.: 10/807,030 Confirmation No.: 2253  
Filed: March 23, 2004  
For: DEVICE AND METHOD FOR CONTROLLING  
A PARKING LOCK HOLDING MAGNET  
Art Unit: 3681  
Examiner: Roger L. PANG  
Attorney Docket No.: 588.1020  
Customer No.: 23280

Mail Stop: APPEAL BRIEF - PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

January 25, 2007

**APPELLANTS' BRIEF UNDER 37 C.F.R. § 41.37**

Sir:

Appellants submit this brief for the consideration of the Board of Patent Appeals and Interferences (the "Board") in support of their appeal of the Final Rejection dated August 1, 2006 in this application. The statutory fee of \$500.00 is paid herewith.

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## 1. REAL PARTY IN INTEREST

The real party in interest is LuK Lamellen und Kupplungsbau Beteiligungs KG, a German corporation having a place of business in Buehl, Germany, the assignee of the entire right, title and interest in the above-identified patent application.

## 2. RELATED APPEALS AND INTERFERENCES

Appellants, their legal representatives, and assignee are not aware of any appeal, interference or judicial proceeding that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

## 3. STATUS OF CLAIMS

Claims 7 to 13 have been canceled. Claims 1 to 6 and 14 to 16 are pending. Claims 1, 2, 4 to 6 and 14 to 16 have been finally rejected, and claim 3 has been objected to as per the Final Office Action dated August 1, 2006.

The rejections to claims 1, 2, 4 to 6 and 14 to 16 thus are appealed. A copy of appealed claims 1, 2, 4 to 6 and 14 to 16 is attached hereto as Appendix A.

Applicant reserves the right to file for the objected claim at a later date.

## 4. STATUS OF AMENDMENTS AFTER FINAL

No amendments after final office action were made. Applicants' Notice of Appeal was received by the U.S. PTO on November 27, 2006.

## 5. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 recites a device for controlling an electrically-operated holding magnet (see, e.g. 2 in Fig. 1 and specification at [0035]) of a parking lock of a motor vehicle transmission (see, e.g. specification at [0011] and [0036]), the holding magnet being supplied with power via a transmission control (see, e.g. 3 in Fig. 1 and specification at [0036] and 9 in

Fig. 2) resettable to a basic setting (see, e.g. specification at [0040] and [0048]) and for holding the parking lock in a disengaged state (see, e.g. specification at [0040] and [0048]), the device comprising: an apparatus (see, e.g. timing relay 5 in Fig. 1 and specification at [0040] or capacitor 17 in Fig. 2 and specification at [0048]) for bridging a reset operation of the transmission control (see, e.g. specification at [0040] and [0048]), the apparatus maintaining a power supply of the holding magnet during the reset operation (see, e.g. specification at [0040] and [0048]).

Independent claim 14 recites a method for controlling an electrically-operated holding magnet (see, e.g. 2 in Fig. 1 and specification at [0035]) of a parking lock of a motor vehicle transmission (see, e.g. specification at [0011] and [0036]), the holding magnet being supplied with power via a transmission control (see, e.g. 3 in Fig. 1 and specification at [0036] and 9 in Fig. 2) resettable to a basic setting (see, e.g. specification at [0040] and [0048]) and for holding the parking lock in a disengaged state (see, e.g. specification at [0040] and [0048]), the method comprising the step of: maintaining the power supply of the holding magnet during a reset of the transmission control (see, e.g. specification at [0040] and [0048]).

## 6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1 to 2, 6 and 14 to 16 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Gierer (US 6,471,027) in view of Sponable (US 5,827,149).

Whether claims 4 to 5 should be rejected under 35 U.S.C. § 103(a) as being unpatentable over Gierer (US 6,471,027) in view of Sponable (US 5,827,149) as applied to claim 1, and further in view of Knappe (GB 1,119,957).

## 7. ARGUMENTS

### Rejections under 35 U.S.C. §103(a) to claims 1 to 2, 6 and 14 to 16

Claims 1 to 2, 6 and 14 to 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gierer (US 6,471,027) in view of Sponable (US 5,827,149).

Gierer describes “a locking system (13) [that] is actuated by a magnet (5) through which a current flows.” See e.g. Abstract. “On the piston 2 are fastened connecting elements 14 and a pawl 15 which engages in a parking gear 16 as a result of the displacement of the piston 2 by the spring 6. By applying a hydraulic pressure in a piston chamber 11, the piston 2 is moved to the opposite end position against the tension of the spring 6 and the pawl 15 releases the parking gear 16 of a shaft 17 of the automatic transmission.” Col. 2, lines 38 to 44.

Sponable describes an electrically powered park lock actuator 10, which “comprises two high-speed, reversible DC electric motor acting via a speed reduction gear train to move a locking pawl into and out of engagement with a gear on the transmission output shaft.” See e.g. Abstract. “As long as the transmission 12 remains in a gear range other than Park, ECU 18 leaves the lock actuator 10 dennergized”. Col. 5, lines 60 to 63.

Claim 1 recites:

A device for controlling an electrically-operated holding magnet of a parking lock of a motor vehicle transmission, the holding magnet being supplied with power via a transmission control resettable to a basic setting and for holding the parking lock in a disengaged state, the device comprising:

an apparatus for bridging a reset operation of the transmission control, the apparatus maintaining a power supply of the holding magnet during the reset operation.

It is respectfully submitted that neither Gierer nor Sponable teach or show a “holding magnet being supplied with power via a transmission control resettable to a basic setting and for holding the parking lock in a disengaged state” or “an apparatus for bridging a reset operation of the transmission control, the apparatus maintaining a power supply of the holding magnet during the reset operation” as recited in claim 1.

Gierer does not teach or disclose at all control device 19 controlling the transmission but merely controlling the parking gear 16 for the transmission 20. Control device 19 is not a

transmission control and has no basic setting of neutral. Control device 19 is completely independent of any transmission control.

More important, Sponable uses a park lock actuator with worm gears and motors to actuate the park lock. When no energy is supplied, or energy is cut off, nothing changes in Sponable. This is different than holding magnet systems where the energization of the magnet holds the park lock in a disengaged state. In that case de-energization causes the holding magnet to not have power, and the park lock to engage. Battery 104 in Sponable supplies power only when the power supply 40 has been incapacitated to move park lock actuator 10 from a locked position to an unlocked position.

The Office Action asserts that a reset operation of a transmission control is "having the transmission anywhere but P." This is certainly not a "reset operation" as per the present claim, which is clearly described in the specification as a repowering of the transmission control (see [0040]). A "reset" ("to set again") requires movement from one condition to another condition and then back ("to set again"). For the transmission control in the present application, this is then from a power condition to an unpowered condition and back to the power condition. (See [0048]). The timing relay 5 and capacitor 17 of the present application as described clearly bridge the reset operation. See [0040] and [0048].

The Office Action identifies no reset operation and clearly no maintaining of power supply during a reset operation.

How having a "reset operation" being merely a condition of a "transmission anywhere but P" as asserted is not understood and makes no sense with the word reset.

If the reset is considered a move from P to Neutral for example, as asserted, maintaining thus would mean that the transmission would not move to Neutral, even though the driver so desires it. Sponable does not teach or disclose any bridging, and certainly not of any reset operation.

The Advisory Action states that "Neutral" is a reset operation. Neutral is not a reset operation but a static condition. "Reset" means to set again. How Neutral alone is a "reset" is not understood.

It is further respectfully submitted that one of skill in the art would not have modified Gierer to provide “an apparatus for bridging a reset operation of the transmission control, the apparatus maintaining a power supply of the holding magnet during the reset operation” as the control devices and parking locks are totally different, and neither reference shows or teaches such an apparatus. No bridging is required or desired by the worm and motor gear system of Sponable.

Moreover, even if somehow Sponable would teach the functionality of maintaining a parking lock in a disengaged state during a reset operation (which it is respectfully submitted it does not), there is no reason or teaching in Sponable to modify Gierer to provide this functionality via the magnet, as many other parts of Gierer could be modified to do so.

Withdrawal of the rejection to claim 1 and its dependent claims under 35 U.S.C. §103(a) is thus respectfully requested.

Claim 14: Argued Separately

Claim 14 recites:

A method for controlling an electrically-operated holding magnet of a parking lock of a motor vehicle transmission, the holding magnet being supplied with power via a transmission control resettable to a basic setting and for holding the parking lock in a disengaged state, the method comprising the step of:

maintaining the power supply of the holding magnet during a reset of the transmission control.

It is respectfully submitted that neither Gierer nor Sponable teach or show a “holding magnet being supplied with power via a transmission control resettable to a basic setting and for holding the parking lock in a disengaged state” or “maintaining the power supply of the holding magnet during a reset of the transmission control” as recited in claim 14.

Gierer does not teach or disclose at all control device 19 controlling the transmission but merely controlling the parking gear 16 for the transmission 20. Control device 19 is not a

transmission control and has no basic setting of neutral. Control device 19 is completely independent of any transmission control.

More important, Sponable uses a park lock actuator with worm gears and motors to actuate the park lock. When no energy is supplied, or energy is cut off, nothing changes in Sponable. This is different than holding magnet systems where the energization of the magnet holds the park lock in a disengaged state. In that case de-energization causes the holding magnet to not have power, and the park lock to engage. Battery 104 in Sponable supplies power only when the power supply 40 has been incapacitated to move park lock actuator 10 from a locked position to an unlocked position.

The Office Action asserts that a reset operation of a transmission control is "having the transmission anywhere but P." This is certainly not a "reset operation" as per the present claim, which is clearly described in the specification as a repowering of the transmission control (see [0040]). A "reset" ("to set again") requires movement from one condition to another condition and then back ("to set again"). For the transmission control in the present application, this is then from a power condition to an unpowered condition and back to the power condition. (See [0048]). The timing relay 5 and capacitor 17 of the present application as described clearly bridge the reset operation. See [0040] and [0048].

The Office Action identifies no reset operation and clearly no maintaining of power supply during a reset operation.

How having a "reset operation" being merely a condition of a "transmission anywhere but P" as asserted is not understood and makes no sense with the word reset.

If the reset is considered a move from P to Neutral for example, as asserted, maintaining thus would mean that the transmission would not move to Neutral, even though the driver so desires it. Sponable does not teach or disclose any maintaining, and certainly not of any reset operation.

The Advisory Action states that "Neutral" is a reset operation. Neutral is not a reset operation but a static condition. "Reset" means to set again. How Neutral alone is a "reset" is not understood.



It is further respectfully submitted that one of skill in the art would not have modified Gierer to provide a method for controlling an electrically-operated holding magnet of a parking lock of a motor vehicle transmission, the method comprising the step of maintaining the power supply of the holding magnet during a reset of the transmission control. No maintaining is required or desired by the worm and motor gear system of Sponable.

Moreover, even if somehow Sponable would teach the functionality of maintaining a parking lock in a disengaged state during a reset operation (which it is respectfully submitted it does not), there is no reason or teaching in Sponable to modify Gierer to provide this functionality via the magnet, as many other parts of Gierer could be modified to do so.

Withdrawal of the rejection to claim 14 and its dependent claims under 35 U.S.C. §103(a) is thus respectfully requested as well.

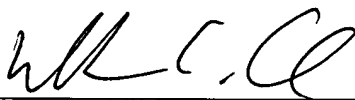
Rejections under 35 U.S.C. §103(a) to claims 4 to 5

Claims 4 to 5 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gierer (US 6,471,027) in view of Sponable (US 5,827,149) as applied to claim 1, and further in view of Knappe (GB 1,119,957).

In view of the above, withdrawal of this rejection is also respectfully requested.

Respectfully submitted,

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**APPENDIX A:**

**PENDING CLAIMS 1, 2, 4 TO 6 AND 14 TO 16  
OF U.S. APPLICATION SERIAL NO. 10/807,030**

Claim 1 (original): A device for controlling an electrically-operated holding magnet of a parking lock of a motor vehicle transmission, the holding magnet being supplied with power via a transmission control resettable to a basic setting and for holding the parking lock in a disengaged state, the device comprising:

an apparatus for bridging a reset operation of the transmission control, the apparatus maintaining a power supply of the holding magnet during the reset operation.

Claim 2 (original): The device as recited in claim 1 wherein the apparatus interrupts the power supply of the holding magnet as a function of a condition indicating that the parking lock is to be engaged

Claim 4 (original): The device as recited in claim 1 wherein the apparatus has an electric circuit including an electric energy storer, an energy output of the energy storer maintaining the power supply of the holding magnet during the reset operation.

Claim 5 (original): The device as recited in claim 4 wherein the electric energy storer is a capacitor.

Claim 6 (original): The device as recited in claim 1 wherein the apparatus has a relay or a transistor energized as a function of a condition that indicates that the parking lock is to be engaged, thus interrupting an energy supply circuit of the holding magnet.

Claim 14 (original): A method for controlling an electrically-operated holding magnet of a parking lock of a motor vehicle transmission, the holding magnet being supplied with power via

a transmission control resettable to a basic setting and for holding the parking lock in a disengaged state, the method comprising the step of:

maintaining the power supply of the holding magnet during a reset of the transmission control.

Claim 15 (original): The method as recited in claim 14 further comprising interrupting the power supply of the holding magnet as a function of a condition indicating that the parking lock is to be engaged.

Claim 16 (original): The method as recited in claim 15 wherein the condition represents an intent of a driver for the parking lock to be engaged, the condition being met by an action triggered by the driver.

## **APPENDIX B**

Evidence Appendix under 37 C.F.R. §41.37 (c) (ix):

No evidence pursuant to 37 C.F.R. §§1.130, 1.131 or 1.132 and relied upon in the appeal has been submitted by appellants or entered by the examiner.

### **APPENDIX C**

Related proceedings appendix under 37 C.F.R. §41.37 (c) (x):

As stated in “2. RELATED APPEALS AND INTERFERENCES” of this appeal brief, appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.